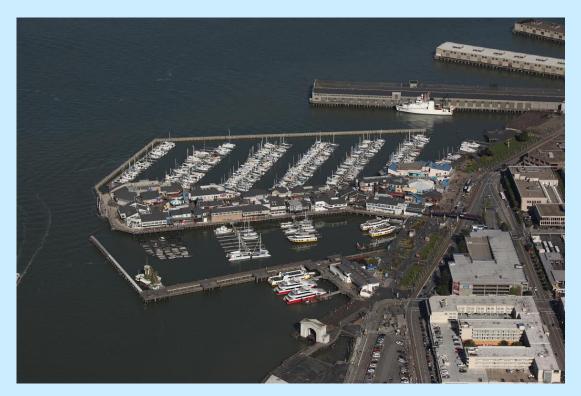
PIER 39 MARINA



- We are a 300 berth recreational marina and a tenant of the Port of San Francisco.
- The slips (ranging in size from 36ft to 90 ft) were sold as 50 year subleases in 1984 and expire in 2034.
- All operation and reserve cost obligations are met through an annual budget that is divided amongst a total of 280 sub-lessees. This includes dredging and permitting costs.

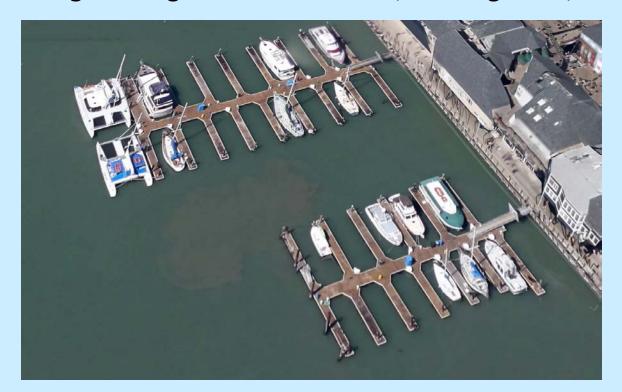
Dredging Episode 2000

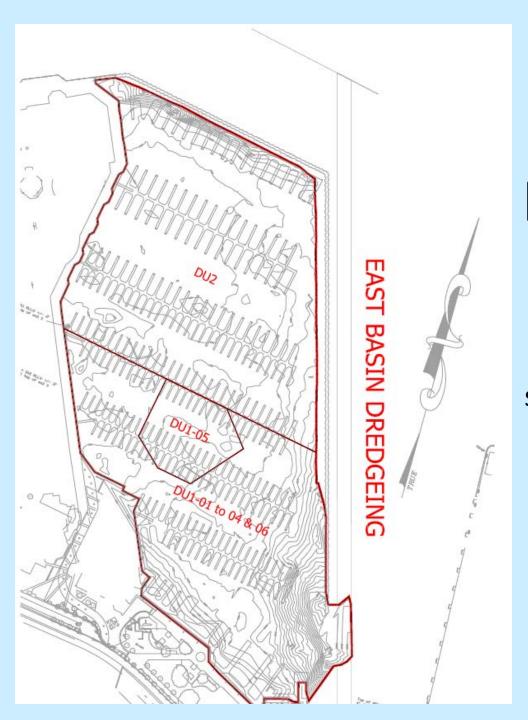
- We have dredged on average about every 10 years and there have been three dredging episodes since PIER 39 marina was built.
- In 2000 we dredged the East harbor. At that time the pre and post dredge testing showed no abnormal PAH contamination and the total yardage (27,821) was disposed of at Alcatraz at a cost of \$8 per cubic yard (total \$222,568, plus \$7500 for testing costs).



Dredging Episode 2007

In 2007 we dredged the West harbor. Sediment test results indicated elevated PAH levels requiring an upland disposal via barge. The cost was \$47 per cubic yard to dredge a total of 9000 cubic yards to -9 ft. Total cost was \$486,400 for dredging, \$6800 for an environmental assessment for the IHA permit (sea lions) and engineering costs of \$6349.76, totaling \$499,549.





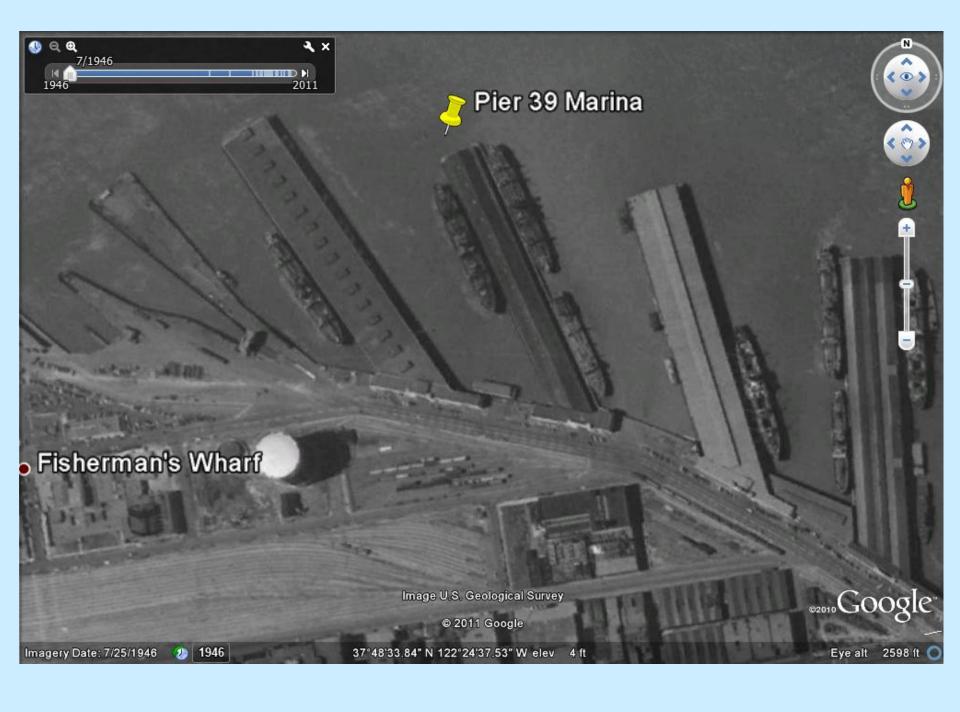
Dredging Episode 2012

Pre dredge tests indicated that in the East Harbor, pre dredge sediment tests showed elevated PAH levels in 6300 cubic yards of material that originated at the shore line and moved through the harbor toward the Bay. This had to be put on a barge for ocean disposal.

- The highest concentrations of elevated PAH levels (a relatively low volume) were close to the shore in west side harbor.
- This area required removal to a specified location for drying and then disposal at a designated landfill.
- Due to the increase in elevated PAH results in the pre dredge tests DMMO required additional post dredge testing of the Z layer.
- As a result of the elevated PAH levels we now had to pay \$87.98 per cubic yard for Ocean disposal of the east harbor sediment (\$554,394) and \$13.66 per cubic yard (\$231,186) for Alcatraz disposal.
- Total cost for 2012 was \$892,004 that included \$33,000 in additional testing costs.

Challenges

- If the contaminants that incur elevated PAH levels continue to creep through the harbor at the rate indicated since 2000, we are looking at disposal, testing and remediation costs that could exceed 2.5 million dollars in additional costs for our next episode.
- This would be prohibitively expensive given our only source of income is from 280 lease owners.
- The cost for small marinas needs to remain a long term consideration or we could quite literally go out of business.



Moving Forward

- Where possible, can in bay disposal remain an option, or develop more reasonable upland disposal options where we can co-op together to share site fees?
- Can an agency representative in charge of the permitting do a pre dredge site visit to see the area and so be aware of possible challenges?
- Can we have more forums for the 'non scientist' to show how science supports the regulations? Example would be fish windows and the discussions following testing at the DMMO?

Thank You

